Amendments to the Claims:

All claims have been amended herein. Claims 9, 18 and 274 are canceled. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

pumping the viscous material into the viscous material pool;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

2. (Currently amended) The method according to claim 1, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

3. (Currently amended) The method according to claim 2, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

4. (Currently amended) The method according to claim 1, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

5. (Currently amended) The method according to claim 1, wherein ~~said~~ aligning comprises aligning ~~said~~the at least one semiconductor component above ~~said~~the at least one upward facing opening.

6. (Currently amended) The method according to claim 1, wherein ~~said~~ wetting comprises biasing ~~said~~the at least one semiconductor component downward proximate the viscous material in ~~said~~the viscous material pool such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

7. (Currently amended) The method according to claim 6, wherein ~~said~~ biasing comprises providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

8. (Currently amended) The method according to claim 1, wherein ~~said~~ wetting comprises raising ~~said~~the viscous material pool upward proximate ~~said~~the at least one semiconductor component such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

9. (Canceled)

10. (Currently amended) The method according to claim 1, wherein ~~said wetting~~ pumping comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component.

11. (Currently amended) The method according to claim ~~10~~1, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

12. (Currently amended) The method according to claim 1, wherein ~~said~~ wetting comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

13. (Currently amended) The method according to claim 1, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

14. (Currently amended) The method according to claim 1, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

15. (Currently amended) The method according to claim 1, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

16. (Currently amended) The method according to claim 15, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

17. (Currently amended) The method according to claim 16, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

18. (Canceled)

19. (Currently amended) The method according to claim 16, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

20. (Currently amended) The method according to claim 1, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

21. (Currently amended) The method according to claim 20, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

22. (Currently amended) The method according to claim 21, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

23. (Currently amended) The method according to claim 21, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

24. (Currently amended) The method according to claim 21, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

25. (Currently amended) The method according to claim 21, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

26. (Currently amended) The method according to claim 1, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

27. (Currently amended) The method according to claim 1, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

28. (Currently amended) The method according to claim 27, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

29. (Currently amended) The method according to claim 1, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location of ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

30. (Currently amended) The method according to claim 1, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

31. (Currently amended) The method according to claim 1, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

32. (Currently amended) The method according to claim 31, wherein ~~further comprising~~ pumping comprises pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

33. (Currently amended) The method according to claim 32, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

34. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool including at least one reservoir containing viscous material, ~~said~~the viscous material pool defined by at least one peripheral edge having a height and configured such that an exposed surface of the viscous material is located in a precise location, ~~said~~the viscous material pool including at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material, ~~said~~the exposed

surface of ~~said~~the viscous material having a height that extends above ~~said~~the height of ~~said~~the at least one peripheral edge;

leveling the exposed surface of ~~said~~the viscous material; and

coating only a specific portion of a surface of at least one semiconductor component with ~~said~~the viscous material.

35. (Currently amended) The method according to claim 34, wherein ~~said~~ providing a viscous material pool including at least one reservoir containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

36. (Currently amended) The method according to claim 35, wherein ~~said~~ providing a viscous material pool including at least one reservoir containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

37. (Currently amended) The method according to claim 34, wherein ~~said~~ coating only a specific portion of a surface of at least one semiconductor component comprises applying ~~said~~the viscous material to at least one of a lead finger, bus bars, and a die attach paddle.

38. (Currently amended) The method according to claim 34, wherein ~~said~~ coating only a specific portion of a surface of at least one semiconductor component comprises aligning ~~said~~the at least one semiconductor component over ~~said~~the at least one upward facing opening such that ~~said~~the exposed surface contacts only ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component.

39. (Currently amended) The method according to claim 34, wherein ~~said~~ coating comprises biasing ~~said~~the at least one semiconductor component downward proximate the viscous material in ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material contacts ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component.

40. (Currently amended) The method according to claim 39, wherein ~~said~~ biasing comprises providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material pool.

41. (Currently amended) The method according to claim 34, wherein ~~said~~ coating comprises raising ~~said~~the viscous material pool upward proximate ~~said~~the at least one semiconductor component such that ~~said~~the exposed surface of ~~said~~the viscous material contacts ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component.

42. (Currently amended) The method according to claim 34, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

43. (Currently amended) The method according to claim 34, wherein ~~said~~ coating comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool, wherein ~~said~~the height of ~~said~~the viscous material is sufficient to contact only ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component.

44. (Currently amended) The method according to claim 43, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

45. (Currently amended) The method according to claim 34, wherein ~~said~~ coating comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils to ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component.

46. (Currently amended) The method according to claim 34, further comprising coating ~~said~~the surface of the at least one semiconductor component with a surfactant prior to ~~said~~the coating ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

47. (Currently amended) The method according to claim 34, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

48. (Currently amended) The method according to claim 34, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

49. (Currently amended) The method according to claim 48, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises metering ~~said~~the initial exposed surface height with a wiper.

50. (Currently amended) The method according to claim 48, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

51. (Currently amended) The method according to claim 48, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

52. (Currently amended) The method according to claim 48, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

53. (Currently amended) The method according to claim 52, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material and;
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material.

54. (Currently amended) The method according to claim 53, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the viscous material is achieved.

55. (Currently amended) The method according to claim 53, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

56. (Currently amended) The method according to claim 53, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

57. (Currently amended) The method according to claim 53, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the ultrasonic sound wave and then generates the control signal.

58. (Currently amended) The method according to claim 34, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

59. (Currently amended) The method according to claim 58, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

60. (Currently amended) The method according to claim 34, wherein ~~said~~ coating comprises applying ~~said~~the viscous material to ~~said~~the specific portion on ~~said~~the surface on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

61. (Currently amended) The method according to claim 34, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

62. (Currently amended) The method according to claim 34, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

63. (Currently amended) The method according to claim 62, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

64. (Currently amended) The method according to claim 63, wherein ~~said~~ coating comprises contacting ~~said~~the specific portion of ~~said~~the surface of ~~said~~the at least one semiconductor component with ~~said~~the viscous material over ~~said~~the curved-edge spillway.

65. (Currently amended) The method according to claim 34, wherein ~~said~~ coating only a specific portion of a surface of at least one semiconductor component comprises coating a bottom surface of at least one lead finger with ~~said~~the viscous material.

66. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool including an inlet and shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

delivering the viscous material into the viscous material pool through the inlet;

aligning at least one semiconductor component above ~~said~~the at least one upward facing opening; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

67. (Currently amended) The method according to claim 66, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

68. (Currently amended) The method according to claim 67, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

69. (Currently amended) The method according to claim 66, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

70. (Currently amended) The method according to claim 66, wherein ~~said~~ wetting comprises biasing ~~said~~the at least one semiconductor component downward proximate the viscous material in ~~said~~the viscous material pool such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

71. (Currently amended) The method according to claim 70, wherein ~~said~~ biasing comprises providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

72. (Currently amended) The method according to claim 66, wherein ~~said~~ wetting comprises raising ~~said~~the viscous material pool upward proximate ~~said~~the at least one semiconductor component such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

73. (Currently amended) The method according to claim 66, ~~further comprising~~ wherein delivering comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

74. (Currently amended) The method according to claim 66, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component.

75. (Currently amended) The method according to claim 74, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

76. (Currently amended) The method according to claim 66, wherein ~~said~~ wetting comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

77. (Currently amended) The method according to claim 66, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

78. (Currently amended) The method according to claim 66, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

79. (Currently amended) The method according to claim 66, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

80. (Currently amended) The method according to claim 79, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

81. (Currently amended) The method according to claim 80, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

82. (Currently amended) The method according to claim 80, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

83. (Currently amended) The method according to claim 80, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

84. (Currently amended) The method according to claim 66, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

85. (Currently amended) The method according to claim 84, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:

delivering ~~said~~the viscous material to ~~said~~the viscous material pool;

providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;

utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

86. (Currently amended) The method according to claim 85, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

87. (Currently amended) The method according to claim 85, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

88. (Currently amended) The method according to claim 85, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

89. (Currently amended) The method according to claim 85, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

90. (Currently amended) The method according to claim 66, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

91. (Currently amended) The method according to claim 66, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

92. (Currently amended) The method according to claim 91, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

93. (Currently amended) The method according to claim 66, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location of ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

94. (Currently amended) The method according to claim 66, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including ~~an inlet,~~ an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

95. (Currently amended) The method according to claim 66, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

96. (Currently amended) The method according to claim 95, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

97. (Currently amended) The method according to claim 96, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

98. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

pumping the viscous material to a desired height above the viscous material pool;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

biasing ~~said~~the at least one semiconductor component downward proximate the viscous material in ~~said~~the viscous material pool such that a specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

99. (Currently amended) The method according to claim 98, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

100. (Currently amended) The method according to claim 99, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

101. (Currently amended) The method according to claim 98, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

102. (Currently amended) The method according to claim 98, wherein ~~said~~ biasing comprises providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

103. (Currently amended) The method according to claim 98, further comprising raising ~~said~~the viscous material pool upward proximate ~~said~~the at least one semiconductor component such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

104. (Currently amended) The method according to claim 98, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

105. (Currently amended) The method according to claim 98, wherein ~~further comprising~~ pumping ~~said~~comprises pumping the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component.

106. (Currently amended) The method according to claim 105, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

107. (Currently amended) The method according to claim 98, wherein ~~said~~t biasing comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

108. (Currently amended) The method according to claim 98, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the contacting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

109. (Currently amended) The method according to claim 98, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

110. (Currently amended) The method according to claim 98, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the biasing ~~said~~the at least one semiconductor component.

111. (Currently amended) The method according to claim 110, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

112. (Currently amended) The method according to claim 111, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

113. (Currently amended) The method according to claim 111, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

114. (Currently amended) The method according to claim 111, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

115. (Currently amended) The method according to claim 98, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

116. (Currently amended) The method according to claim 115, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

117. (Currently amended) The method according to claim 116, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

118. (Currently amended) The method according to claim 116, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

119. (Currently amended) The method according to claim 116, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

120. (Currently amended) The method according to claim 116, wherein ~~said~~ controlling comprises providing a detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

121. (Currently amended) The method according to claim 98, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

122. (Currently amended) The method according to claim 98, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

123. (Currently amended) The method according to claim 122, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

124. (Currently amended) The method according to claim 98, wherein ~~said~~ biasing comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

125. (Currently amended) The method according to claim 98, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

126. (Currently amended) The method according to claim 98, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

127. (Currently amended) The method according to claim 126, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

128. (Currently amended) The method according to claim 127, wherein ~~said~~ contacting comp rises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

129. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool; ~~and~~

raising the viscous material to a desired height above the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material by raising ~~said~~the viscous material pool upward proximate ~~said~~the at least one semiconductor component such that ~~said~~the specific location of ~~said~~the at least one semiconductor component contacts ~~said~~the exposed surface of ~~said~~the viscous material.

130. (Currently amended) The method according to claim 129, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

131. (Currently amended) The method according to claim 130, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

132. (Currently amended) The method according to claim 129, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

133. (Currently amended) The method according to claim 129, wherein ~~said~~ wetting further comprises providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

134. (Currently amended) The method according to claim 129, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

135. (Currently amended) The method according to claim 129, wherein ~~said wetting~~ raising further comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous

material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component.

136. (Currently amended) The method according to claim 135, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

137. (Currently amended) The method according to claim 129, wherein ~~said~~ wetting further comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

138. (Currently amended) The method according to claim 129, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

139. (Currently amended) The method according to claim 129, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

140. (Currently amended) The method according to claim 129, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

141. (Currently amended) The method according to claim 140, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

142. (Currently amended) The method according to claim 141, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

143. (Currently amended) The method according to claim 141, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

144. (Currently amended) The method according to claim 141, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

145. (Currently amended) The method according to claim 129, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

146. (Currently amended) The method according to claim 145, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:

delivering ~~said~~the viscous material to ~~said~~the viscous material pool;

providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;

utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

147. (Currently amended) The method according to claim 146, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

148. (Currently amended) The method according to claim 146, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

149. (Currently amended) The method according to claim 146, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

150. (Currently amended) The method according to claim 146, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

151. (Currently amended) The method according to claim 129, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

152. (Currently amended) The method according to claim 129, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

153. (Currently amended) The method according to claim 152, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

154. (Currently amended) The method according to claim 129, wherein ~~said~~ wetting further comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

155. (Currently amended) The method according to claim 129, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

156. (Currently amended) The method according to claim 129, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

157. (Currently amended) The method according to claim 156, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

158. (Currently amended) The method according to claim 157, wherein ~~said~~ wetting further comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

159. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component by pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component.

160. (Currently amended) The method according to claim 159, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

161. (Currently amended) The method according to claim 160, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

162. (Currently amended) The method according to claim 159, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

163. (Currently amended) The method according to claim 159, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

164. (Currently amended) The method according to claim 159, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

165. (Currently amended) The method according to claim 159, wherein ~~said~~ pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

166. (Currently amended) The method according to claim 159, wherein ~~said~~ wetting further comprises applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

167. (Currently amended) The method according to claim 159, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

168. (Currently amended) The method according to claim 159, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

169. (Currently amended) The method according to claim 159, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

170. (Currently amended) The method according to claim 169, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

171. (Currently amended) The method according to claim 170, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

172. (Currently amended) The method according to claim 170, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

173. (Currently amended) The method according to claim 170, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

174. (Currently amended) The method according to claim 159, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

175. (Currently amended) The method according to claim 174, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:

delivering ~~said~~the viscous material to ~~said~~the viscous material pool;

providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;

utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

176. (Currently amended) The method according to claim 175, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

177. (Currently amended) The method according to claim 175, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

178. (Currently amended) The method according to claim 175, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

179. (Currently amended) The method according to claim 175, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

180. (Currently amended) The method according to claim 159, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

181. (Currently amended) The method according to claim 159, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

182. (Currently amended) The method according to claim 181, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

183. (Currently amended) The method according to claim 159, wherein ~~said~~ wetting further comprises applying ~~said~~the viscous material to ~~said~~the specific location of ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

184. (Currently amended) The method according to claim 159, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

185. (Currently amended) The method according to claim 159, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

186. (Currently amended) The method according to claim 185, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

187. (Currently amended) The method according to claim 186, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

188. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool including an inlet and shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

delivering the viscous material to the viscous material pool through the inlet;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component by applying a layer of ~~said~~the viscous material having a thickness between 0.1 and 15 mils on ~~said~~the specific location of ~~said~~the at least one semiconductor component.

189. (Currently amended) The method according to claim 188, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

190. (Currently amended) The method according to claim 189, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

191. (Currently amended) The method according to claim 188, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

192. (Currently amended) The method according to claim 188, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

193. (Currently amended) The method according to claim 188, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

194. (Currently amended) The method according to claim 188, further comprising pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

195. (Currently amended) The method according to claim 188, further comprising coating a surface of the at least one semiconductor component with a surfactant prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

196. (Currently amended) The method according to claim 188, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

197. (Currently amended) The method according to claim 188, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

198. (Currently amended) The method according to claim 197, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

199. (Currently amended) The method according to claim 198, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

200. (Currently amended) The method according to claim 198, wherein ~~said providing said viscous material~~ delivering comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

201. (Currently amended) The method according to claim 198, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

202. (Currently amended) The method according to claim 188, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

203. (Currently amended) The method according to claim 202, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:

~~delivering said viscous material to said viscous material pool~~;

providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;

utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

204. (Currently amended) The method according to claim 203, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

205. (Currently amended) The method according to claim 203, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

206. (Currently amended) The method according to claim 203, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

207. (Currently amended) The method according to claim 203, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

208. (Currently amended) The method according to claim 188, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

209. (Currently amended) The method according to claim 188, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

210. (Currently amended) The method according to claim 209, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

211. (Currently amended) The method according to claim 188, wherein ~~said~~ wetting further comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

212. (Currently amended) The method according to claim 188, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including ~~an inlet,~~ an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

213. (Currently amended) The method according to claim 188, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

214. (Currently amended) The method according to claim 213, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

215. (Currently amended) The method according to claim 214, wherein ~~said~~ wetting further comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

216. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool;

coating a surface of the at least one semiconductor component with a surfactant; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material after ~~said~~the coating ~~said~~the surface.

217. (Currently amended) The method according to claim 216, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

218. (Currently amended) The method according to claim 217, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

219. (Currently amended) The method according to claim 216, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

220. (Currently amended) The method according to claim 216, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

221. (Currently amended) The method according to claim 216, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

222. (Currently amended) The method according to claim 216, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

223. (Currently amended) The method according to claim 216, further comprising adding an adhesion promoter to ~~said~~the viscous material, wherein ~~said~~the adhesion promoter is selected from the group consisting of silane, siloxane, and polyimide siloxane.

224. (Currently amended) The method according to claim 216, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

225. (Currently amended) The method according to claim 224, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

226. (Currently amended) The method according to claim 225, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

227. (Currently amended) The method according to claim 225, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

228. (Currently amended) The method according to claim 225, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

229. (Currently amended) The method according to claim 216, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

230. (Currently amended) The method according to claim 229, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

231. (Currently amended) The method according to claim 230, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

232. (Currently amended) The method according to claim 230, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

233. (Currently amended) The method according to claim 230, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

234. (Currently amended) The method according to ~~claim230,~~ claim 230, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

235. (Currently amended) The method according to claim 216, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

236. (Currently amended) The method according to claim 216, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

237. (Currently amended) The method according to claim 236, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

238. (Currently amended) The method according to claim 216, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

239. (Currently amended) The method according to claim 216, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

240. (Currently amended) The method according to claim 216, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

241. (Currently amended) The method according to claim 240, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

242. (Currently amended) The method according to claim 241, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

243. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

adding an adhesion promoter to ~~said~~the viscous material, ~~said~~the adhesion promoter selected from the group consisting of silane, siloxane, and polyimide siloxane;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

244. (Currently amended) The method according to claim 243, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

245. (Currently amended) The method according to claim 244, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

246. (Currently amended) The method according to claim 243, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

247. (Currently amended) The method according to claim 243, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

248. (Currently amended) The method according to claim 243, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

249. (Currently amended) The method according to claim 243, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component,

wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

250. (Currently amended) The method according to claim 243, further comprising leveling ~~said~~the exposed surface of ~~said~~the viscous material prior to ~~said~~the wetting a specific location of ~~said~~the at least one semiconductor component.

251. (Currently amended) The method according to claim 250, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

252. (Currently amended) The method according to claim 251, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

253. (Currently amended) The method according to claim 251, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

254. (Currently amended) The method according to claim 251, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

255. (Currently amended) The method according to claim 243, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

256. (Currently amended) The method according to claim 255, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:

delivering ~~said~~the viscous material to ~~said~~the viscous material pool;

providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;

utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

257. (Currently amended) The method according to claim 256, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

258. (Currently amended) The method according to claim 256, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

259. (Currently amended) The method according to claim 256, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

260. (Currently amended) The method according to claim 256, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

261. (Currently amended) The method according to claim 243, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

262. (Currently amended) The method according to claim 243, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

263. (Currently amended) The method according to claim 243, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

264. (Currently amended) The method according to claim 243, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

265. (Currently amended) The method according to claim 243, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

266. (Currently amended) The method according to claim 243, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

267. (Currently amended) The method according to claim 266, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

268. (Currently amended) The method according to claim 267, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

269. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

pumping the viscous material into the viscous material pool;

aligning at least one semiconductor component over ~~said~~the viscous material pool;

leveling ~~said~~the exposed surface of ~~said~~the viscous material; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material after ~~said~~the leveling ~~said~~the exposed surface.

270. (Currently amended) The method according to claim 269, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

271. (Currently amended) The method according to claim 270, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

272. (Currently amended) The method according to claim 269, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

273. (Currently amended) The method according to claim 269, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

274. (Canceled)

275. (Currently amended) The method according to claim 269, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

276. (Currently amended) The method according to claim 269, wherein ~~said~~ leveling comprises:

providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and

flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

277. (Currently amended) The method according to claim 276, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

278. (Currently amended) The method according to claim 276, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

279. (Currently amended) The method according to claim 276, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

280. (Currently amended) The method according to claim 269, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a detection mechanism.

281. (Currently amended) The method according to claim 280, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

282. (Currently amended) The method according to claim 281, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

283. (Currently amended) The method according to claim 281, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

284. (Currently amended) The method according to claim 281, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

285. (Currently amended) The method according to claim 281, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

286. (Currently amended) The method according to claim 269, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

287. (Currently amended) The method according to claim 269, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

288. (Currently amended) The method according to claim 287, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

289. (Currently amended) The method according to claim 269, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

290. (Currently amended) The method according to claim 269, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an

outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

291. (Currently amended) The method according to claim 269, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

292. (Currently amended) The method according to claim 291, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

293. (Currently amended) The method according to claim 292, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

294. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool;

controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material using a pump and a detection mechanism; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

295. (Currently amended) The method according to claim 294, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

296. (Currently amended) The method according to claim 295, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

297. (Currently amended) The method according to claim 294, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

298. (Currently amended) The method according to claim 294, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

299. (Currently amended) The method according to claim 294, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

300. (Currently amended) The method according to claim 294, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

301. (Currently amended) The method according to claim 294, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

302. (Currently amended) The method according to claim 301, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

303. (Currently amended) The method according to claim 301, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

304. (Currently amended) The method according to claim 301, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

305. (Currently amended) The method according to claim 294, wherein ~~said~~ controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing ~~said~~the detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

306. (Currently amended) The method according to claim 305, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous

material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

307. (Currently amended) The method according to claim 305, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

308. (Currently amended) The method according to claim 305, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

309. (Currently amended) The method according to claim 305, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

310. (Currently amended) The method according to claim 294, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including multiple reservoirs housing ~~said~~the viscous material.

311. (Currently amended) The method according to claim 294, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

312. (Currently amended) The method according to claim 311, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

313. (Currently amended) The method according to claim 294, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

314. (Currently amended) The method according to claim 294, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

315. (Currently amended) The method according to claim 294, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

316. (Currently amended) The method according to claim 315, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

317. (Currently amended) The method according to claim 316, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

318. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool including an inlet multiple reservoirs housing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the

at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

delivering the viscous material to the viscous material pool through the inlet;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

319. (Currently amended) The method according to claim 318, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

320. (Currently amended) The method according to claim 318, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

321. (Currently amended) The method according to claim 318, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

322. (Currently amended) The method according to claim 318, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

323. (Currently amended) The method according to claim 318, wherein delivering comprises ~~further comprising~~ pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

324. (Currently amended) The method according to claim 318, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component by pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

325. (Currently amended) The method according to claim 318, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

326. (Currently amended) The method according to claim 325, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

327. (Currently amended) The method according to claim 325, wherein ~~said providing said viscous material~~ delivering comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

328. (Currently amended) The method according to claim 325, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

329. (Currently amended) The method according to claim 318, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material by:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing a detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

330. (Currently amended) The method according to claim 329, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

331. (Currently amended) The method according to claim 329, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

332. (Currently amended) The method according to claim 329, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

333. (Currently amended) The method according to claim 329, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

334. (Currently amended) The method according to claim 318, further comprising feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

335. (Currently amended) The method according to claim 334, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

336. (Currently amended) The method according to claim 318, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

337. (Currently amended) The method according to claim 318, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including ~~an inlet,~~ an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

338. (Currently amended) The method according to claim 318, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

339. (Currently amended) The method according to claim 338, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

340. (Currently amended) The method according to claim 339, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

341. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise

location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool;

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material; and

feeding ~~said~~the at least one semiconductor component through a curing oven to set the viscous material.

342. (Currently amended) The method according to claim 341, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

343. (Currently amended) The method according to claim 342, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

344. (Currently amended) The method according to claim 341, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

345. (Currently amended) The method according to claim 341, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

346. (Currently amended) The method according to claim 341, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

347. (Currently amended) The method according to claim 341, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

348. (Currently amended) The method according to claim 341, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

349. (Currently amended) The method according to claim 348, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

350. (Currently amended) The method according to claim 348, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

351. (Currently amended) The method according to claim 348, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

352. (Currently amended) The method according to claim 341, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material by:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing a detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~ viscous material pool.

353. (Currently amended) The method according to claim 352, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

354. (Currently amended) The method according to claim 352, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

355. (Currently amended) The method according to claim 352, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

356. (Currently amended) The method according to claim 352, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

357. (Currently amended) The method according to claim 341, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

358. (Currently amended) The method according to claim 341, wherein ~~said~~ wetting comprises applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

359. (Currently amended) The method according to claim 341, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

360. (Currently amended) The method according to claim 341, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

361. (Currently amended) The method according to claim 360, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

362. (Currently amended) The method according to claim 361, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

363. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material by applying ~~said~~the viscous material to ~~said~~the specific location on ~~said~~the at least one semiconductor component under at least a partially evacuated chamber.

364. (Currently amended) The method according to claim 363, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

365. (Currently amended) The method according to claim 364, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

366. (Currently amended) The method according to claim 363, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

367. (Currently amended) The method according to claim 363, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

368. (Currently amended) The method according to claim 363, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

369. (Currently amended) The method according to claim 363, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

370. (Currently amended) The method according to claim 363, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

371. (Currently amended) The method according to claim 370, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

372. (Currently amended) The method according to claim 370, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

373. (Currently amended) The method according to claim 370, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

374. (Currently amended) The method according to claim 363, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material by:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing a detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and

providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

375. (Currently amended) The method according to claim 374, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

376. (Currently amended) The method according to claim 374, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

377. (Currently amended) The method according to claim 374, wherein ~~said~~ providing ~~said~~the detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

378. (Currently amended) The method according to claim 374, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

379. (Currently amended) The method according to claim 363, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

380. (Currently amended) The method according to claim 363, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including an inlet, an outlet and a plate-type reservoir, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the plate-type reservoir and wherein ~~said~~the viscous material flows from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate.

381. (Currently amended) The method according to claim 363, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

382. (Currently amended) The method according to claim 381, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

383. (Currently amended) The method according to claim 382, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

384. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool including an inlet, an outlet and a plate-type reservoir containing viscous material, ~~said~~the viscous material pool shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the plate-type reservoir and ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool;

allowing ~~said~~the viscous material to flow from ~~said~~the inlet across a plate and into ~~said~~the outlet such that a thin layer of ~~said~~the viscous material is delivered across ~~said~~the plate; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

385. (Currently amended) The method according to claim 384, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

386. (Currently amended) The method according to claim 385, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

387. (Currently amended) The method according to claim 384, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

388. (Currently amended) The method according to claim 384, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

389. (Currently amended) The method according to claim 384, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

390. (Currently amended) The method according to claim 384, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component,

wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

391. (Currently amended) The method according to claim 384, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

392. (Currently amended) The method according to claim 391, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

393. (Currently amended) The method according to claim 391, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

394. (Currently amended) The method according to claim 391, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

395. (Currently amended) The method according to claim 384, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material by:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing a detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

396. (Currently amended) The method according to claim 395, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

397. (Currently amended) The method according to claim 395, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

398. (Currently amended) The method according to claim 395, wherein ~~said~~ providing a detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

399. (Currently amended) The method according to claim 395, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

400. (Currently amended) The method according to claim 384, wherein ~~said~~ providing a viscous material pool comprises providing ~~said~~the viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, wherein ~~said~~the at least one upward facing opening exposes ~~said~~the curved-edge spillway.

401. (Currently amended) The method according to claim 400, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

402. (Currently amended) The method according to claim 401, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.

403. (Currently amended) A method for applying viscous material to at least one semiconductor component, ~~said~~the method comprising:

providing a viscous material pool including a first chamber, a curved-edge spillway and a spill chamber, ~~said~~the viscous material pool containing viscous material and shaped such that an exposed surface of the viscous material is located in a precise location and including at least one upward facing opening, ~~said~~the at least one upward facing opening exposing at least ~~said~~the curved-edge spillway and ~~said~~the exposed surface of ~~said~~the viscous material;

aligning at least one semiconductor component over ~~said~~the viscous material pool; and

wetting a specific location of ~~said~~the at least one semiconductor component with ~~said~~the viscous material.

404. (Currently amended) The method according to claim 403, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing adhesive or polyimide.

405. (Currently amended) The method according to claim 404, wherein ~~said~~ providing a viscous material pool containing viscous material comprises providing ~~said~~the viscous material pool containing ~~said~~the adhesive selected from the group consisting of thermoplastics, thermoset resins, flowable pastes, and B-stage adhesive materials.

406 (Currently amended) The method according to claim 403, wherein ~~said~~ aligning at least one semiconductor component comprises placing at least one of a lead finger, bus bars, and a die attach paddle above ~~said~~the viscous material pool.

407. (Currently amended) The method according to claim 403, further comprising providing at least one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configured to place ~~said~~the at least one semiconductor component proximate ~~said~~the viscous material.

408. (Currently amended) The method according to claim 403, further comprising pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

409. (Currently amended) The method according to claim 403, wherein ~~said~~ wetting comprises pumping ~~said~~the viscous material to a height above ~~said~~the viscous material pool sufficient to contact ~~said~~the specific location of ~~said~~the at least one semiconductor component, wherein ~~said~~the pumping comprises creating a moving wave of ~~said~~the viscous material traveling across ~~said~~the viscous material pool.

410. (Currently amended) The method according to claim 403, further comprising:
providing ~~said~~the viscous material to ~~said~~the viscous material pool such that ~~said~~the exposed surface of ~~said~~the viscous material reaches an initial exposed surface height higher than a desired exposed surface height; and
flattening ~~said~~the initial exposed surface height to the desired exposed surface height.

411. (Currently amended) The method according to claim 410, wherein ~~said~~ flattening comprises metering ~~said~~the initial exposed surface height with a wiper.

412. (Currently amended) The method according to claim 410, wherein ~~said~~ providing ~~said~~the viscous material comprises pumping ~~said~~the viscous material into ~~said~~the viscous material pool.

413. (Currently amended) The method according to claim 410, wherein ~~said~~ flattening ~~said~~the initial exposed surface height comprises drawing back ~~said~~the viscous material to flatten ~~said~~the exposed surface of ~~said~~the viscous material.

414. (Currently amended) The method according to claim 403, further comprising controlling the height of ~~said~~the exposed surface of ~~said~~the viscous material comprises:
delivering ~~said~~the viscous material to ~~said~~the viscous material pool;
providing a detection mechanism comprising a transmitter, a receiver, and a control signal;
utilizing ~~said~~the transmitter and ~~said~~the receiver to determine the height of the exposed surface of ~~said~~the viscous material; and
providing ~~said~~the control signal to control ~~said~~the delivery of ~~said~~the viscous material to ~~said~~the viscous material pool.

415. (Currently amended) The method according to claim 414, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a pump to stop ~~said~~the delivering ~~said~~the viscous material to ~~said~~the viscous material pool when a desired height of ~~said~~the exposed surface is achieved.

416. (Currently amended) The method according to claim 414, wherein ~~said~~ providing ~~said~~the control signal comprises triggering a valve to shut to prevent additional viscous material from entering ~~said~~the viscous material pool.

417. (Currently amended) The method according to claim 414, wherein ~~said~~ providing a detection mechanism comprises providing a laser transmitter, wherein a light beam from ~~said~~the laser transmitter is altered by the exposed surface and the receiver detects the alteration of ~~said~~the light beam and then generates ~~said~~the control signal.

418. (Currently amended) The method according to claim 414, wherein ~~said~~ controlling comprises providing ~~said~~the detection mechanism comprising an ultrasonic transmitter, wherein an ultrasonic sound wave from ~~said~~the ultrasonic transmitter is altered by the exposed surface and the receiver detects the alteration of the ultrasonic sound wave and then generates the control signal.

419. (Currently amended) The method according to claim 403, further comprising attaching ~~said~~the at least one semiconductor component to a semiconductor die.

420. (Currently amended) The method according to claim 403, further comprising pumping ~~said~~the viscous material into ~~said~~the first chamber and over ~~said~~the curved-edge spillway at a constant rate.

421. (Currently amended) The method according to claim 420, wherein ~~said~~ wetting comprises contacting ~~said~~the specific location of ~~said~~the at least one semiconductor component with the viscous material over the curved-edge spillway.